

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended). A computer system, comprising:

a plurality of data processing channels requiring data input and generating data output;

a hard disk drive adapter ~~connected to~~ and a plurality of cables or connectors individually connecting each of said plurality of data processing channels directly to said hard disk drive adapter; and

a single hard disk drive connected to said hard disk drive adapter;

said hard disk drive adapter forming an intermediate adapter for transferring data between said plurality of data processing channels and said single hard disk drive.

Claim 2 (original). The computer system according to claim 1, which further comprises a data storage device connected to said hard disk drive adapter for transferring data via said hard disk drive adapter in accordance with a given communications protocol.

Claim 3 (canceled).

Claim 4 (original). The computer system according to claim 1, wherein said intermediate adapter is configured to transfer the data from each of said plurality of data processing channels to said hard disk drive, substantially without using any processing channel resources.

Claim 5 (currently amended). The computer system according to claim 1, wherein said plurality of data processing channels are central processors each with a hard disk drive connector communicating with said intermediate adapter via said cables or connectors.

Claim 6 (currently amended). In a computer system with a plurality of data processing channels having processors generating data output, a data storage and transfer system, the computer system comprising:

a data storage device having a data storage capacity at least as large as a maximum storage capacity required by the channels of the plurality of data processing channels combined, and having parts each assigned to a respective one of the plurality of data processing channels;

an intermediate adapter connected between the plurality of data processing channels and said data storage device for transferring data between the data processing channels and said data storage device;

said intermediate adapter including a ~~device for distributing~~ logic for routing the data being transferred between said data storage device and the plurality of data processing channels; and channels and for calculating a physical address on said

data storage device by selectively adding an offset that is different for each said data processing channel, whereby ~~wherein~~ said intermediate adapter connects each of the plurality of data processing channels to a respective said part of said data storage device.

Claim 7 (canceled).

Claim 8 (original). The computer system according to claim 6, wherein the parts of the data storage device assigned to the plurality of data processing channels are physical partitions.

Claim 9 (original). The computer system according to claim 6, wherein said data storage device is a partitioned hard disk drive.

Claim 10 (original). The computer system according to claim 6, which comprises a plurality of cables or connectors connecting channels of said intermediate adapter to said data storage device.

Claim 11 (original). The computer system according to claim 10, wherein said data storage device a fixed or removable data storage device.

Claim 12 (original). The computer system according to claim 6, wherein said intermediate adapter is configured to be entirely transparent to an operation of the data processing channel and said data storage device.

Claim 13 (new). A computer system, comprising:

a plurality of data processing channels requiring data input and generating data output;

a hard disk drive adapter connected to each of said plurality of data processing channels; and

a single hard disk drive connected to said hard disk drive adapter, said hard disk drive having partitions with data storage locations each defined by a unique physical address, each partition having a unique physical start address and a unique size, and each partition being assigned to a respective one of said data processing channels;

said hard disk drive adapter forming an intermediate adapter for transferring data between said plurality of data processing channels and said single hard disk drive, said hard disk drive adapter having means, each assigned to a respective one of said data processing channels, for calculating an actual data storage location on the hard disk drive assigned to the respective one of said data processing channels by adding an offset corresponding to the unique size of all preceding partitions to an address called by the respective said data processing channel and accessing the data storage location at the resulting address.

Claim 14 (new). The computer system according to claim 13, wherein said intermediate adapter is configured to transfer the data from each of said plurality of

data processing channels to said hard disk drive, substantially without using any processing channel resources.

Claim 15 (new). The computer system according to claim 13, wherein said plurality of data processing channels are central processors each with a hard disk drive connector communicating with said intermediate adapter via cables or connectors.